

Amendments to the Claims

This listing of the claims will replace all prior versions, and listings, of claims in this application.

Listing of Claims

1-27. (Canceled)

28. (Currently amended) A method for producing a fine chemical, comprising culturing a cell containing a vector comprising a nucleic acid molecule comprising the nucleotide sequence set forth in SEQ ID NO:1, or the complement thereof of claim 9 or 10, such that ~~the~~ a fine chemical is produced.

29. (Previously presented) The method of claim 28, wherein said cell is cultured in the presence of a sulfur source.

30. (Currently amended) The method of claim 28, wherein said method further comprises the step of recovering the fine chemical ~~from said culture~~.

31. (Previously presented) The method of claim 28, wherein said fine chemical is an amino acid.

32. (Previously presented) The method of claim 31, wherein said amino acid is methionine or lysine.

33. (Currently amended) The method of claim 28, wherein said method further comprises the step of transfecting said cell with ~~[[the]]~~ a vector ~~of claim 9 or 10~~ comprising a nucleic acid

molecule comprising the nucleotide sequence set forth in SEQ ID NO:1, to result in a cell containing said vector.

34. (Previously presented) The method of claim 28, wherein said cell belongs to the genus *Corynebacterium* or *Brevibacterium*.

35. (Currently amended) The method of claim 28, wherein said cell is selected from the group consisting of: *Corynebacterium glutamicum*, *Corynebacterium herculis*, *Corynebacterium*[[,]] *lilium*, *Corynebacterium acetoacidophilum*, *Corynebacterium acetoglutamicum*, *Corynebacterium acetophilum*, *Corynebacterium ammoniagenes*, *Corynebacterium fujiokense*, *Corynebacterium nitrilophilus*, *Brevibacterium ammoniagenes*, *Brevibacterium butanicum*, *Brevibacterium divaricatum*, *Brevibacterium flavum*, *Brevibacterium healii*, *Brevibacterium ketoglutamicum*, *Brevibacterium ketosoreductum*, *Brevibacterium lactofermentum*, *Brevibacterium linens*, *Brevibacterium paraffinolyticum*, ~~and those strains set forth in Table 3.~~

36. (Currently amended) A method for producing a fine chemical, comprising culturing a cell whose genomic DNA has been altered by the inclusion of a nucleic acid molecule comprising the nucleotide sequence set forth in SEQ ID NO:1, or the complement thereof of any ~~one of claims 1-6.~~

37-47. (Canceled)

48. (New) A method for producing a fine chemical, comprising culturing a cell whose genomic DNA has been altered by the inclusion of a nucleic acid molecule comprising a nucleotide sequence which is at least 90% identical to the nucleotide sequence set forth in SEQ ID NO:1, or the complement thereof, wherein said nucleic acid molecule encodes a metabolic pathway protein.

49. (New) A method for producing a fine chemical, comprising culturing a cell whose genomic DNA has been altered by the inclusion of a nucleic acid molecule comprising a nucleotide sequence which is at least 95% identical to the nucleotide sequence set forth in SEQ ID NO:1, or the complement thereof, wherein said nucleic acid molecule encodes a metabolic pathway protein.

50. (New) A method for producing a fine chemical, comprising culturing a cell whose genomic DNA has been altered by the inclusion of a nucleic acid molecule comprising at least 25 contiguous nucleotides of the nucleotide sequence set forth as SEQ ID NO:1, or the complement thereof, wherein said nucleic acid molecule encodes a metabolic pathway protein.

51. (New) A method for producing a fine chemical, comprising culturing a cell containing a vector comprising a nucleotide sequence which is at least 90% identical to the nucleotide sequence set forth in SEQ ID NO:1, or the complement thereof, wherein said nucleic acid molecule encodes a metabolic pathway protein, such that a fine chemical is produced.

52. (New) A method for producing a fine chemical, comprising culturing a cell containing a vector comprising a nucleic acid molecule comprising at least 25 contiguous nucleotides of the nucleotide sequence set forth as SEQ ID NO:1, or the complement thereof, wherein said nucleic acid molecule encodes a metabolic pathway protein, such that a fine chemical is produced.

53. (New) The method of any one of claims 28, 51, or 52, wherein said vector further comprises one or more additional metabolic pathway nucleic acid molecules.

54. (New) The method of any one of claims 36, 48, 49, or 50, wherein said DNA has been altered by one or more additional metabolic pathway nucleic acid molecules.

55. (New) The method of claim 53, wherein said metabolic pathway is methionine or lysine metabolism.

56. (New) The method of claim 53, wherein the metabolic pathway nucleic acid molecule is selected from the group consisting of *metZ*, *metC*, *metB*, *metA*, *metE*, *metH*, *hom*, *asd*, *lysC*, *lysC/ask*, *rxn00657*, *dapA*, *dapB*, *dapC*, *dapD/argD*, *dapE*, *dapF*, *lysA*, *ddh*, *lysE*, *lysG*, *lysR*, *hsk*, *ppc*, *pycA*, *accD*, *accA*, *accB*, *accC*, *gpdh* genes encoding glucose-6-phosphate-dehydrogenase, *opcA*, *pgdh*, *ta*, *tk*, *pgl*, *rlpe*, *rpe*, or any combination thereof.

57. (New) The method of claim 54, wherein said metabolic pathway is methionine or lysine metabolism.

58. (New) The method of claim 54, wherein the metabolic pathway nucleic acid molecule is selected from the group consisting of *metZ*, *metC*, *metB*, *metA*, *metE*, *metH*, *hom*, *asd*, *lysC*, *lysC/ask*, *rxn00657*, *dapA*, *dapB*, *dapC*, *dapD/argD*, *dapE*, *dapF*, *lysA*, *ddh*, *lysE*, *lysG*, *lysR*, *hsk*, *ppc*, *pycA*, *accD*, *accA*, *accB*, *accC*, *gpdh* genes encoding glucose-6-phosphate-dehydrogenase, *opcA*, *pgdh*, *ta*, *tk*, *pgl*, *rlpe*, *rpe*, or any combination thereof.